PATENT COOPERATION TREATY

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From the INTERNATIONAL SEARCHING AUTHORITY

F	PUI
To:	
DORSEY & WHITNEY LLP	NOTIFICATION OF TRANSMITTAL OF THE INTERNATIONAL SEARCH REPORT AND
Attn. Levitt, Kenneth E.	THE WRITTEN OPINION OF THE INTERNATIONAL
50 South Sixth Street	SEARCHING AUTHORITY, OR THE DECLARATION
Suite 1500	
Minneapolis, Minnesota 55402	·
ETATS-UNIS D'AMERIQUE	
	(PCT Rule 44.1)
·	Date of mailing (day/month/year)
	23/10/2009
Applicant's or agent's file reference KEL/AGM /JJW	FOR FURTHER ACTION See paragraphs 1 and 4 below
189550/PCT 446368-9110	3ee paragraphs 1 and 4 below
International application No.	International filing date
PCT/US2008/080498	(day/month/year) 20/10/2008
Applicant	<u>.!</u>
OSTEOTECH, INC.	
1. X The applicant is hereby notified that the international search Authority have been established and are transmitted herew	n report and the written opinion of the International Searching ith.
Filing of amendments and statement under Article 19:	•
The applicant is entitled, if he so wishes, to amend the clair	• • •
When? The time limit for filing such amendments is nor International Search Report.	mally two months from the date of transmittal of the
Where? Directly to the International Bureau of WIPO, 34	
1211 Geneva 20, Switzerland, Fascimile No.: (4 For more detailed instructions, see the notes on the ac	•
2. The applicant is hereby notified that no international search Article 17(2)(a) to that effect and the written opinion of the I	
3. With regard to the protest against payment of (an) addition	
the protest together with the decision thereon has been	en transmitted to the International Bureau together with the
	test and the decision thereon to the designated Offices.
no decision has been made yet on the protest; the ap	plicant will be notified as soon as a decision is made.
4. Reminders	
Shortly after the expiration of 18 months from the priority date, the	
International Bureau. If the applicant wishes to avoid or postpone application, or of the priority claim, must reach the International Ebefore the completion of the technical preparations for internation	Bureau as provided in Rules 90 <i>bis</i> .1 and 90 <i>bis</i> .3, respectively,
The applicant may submit comments on an informal basis on the International Bureau. The International Bureau will send a copy of international preliminary examination report has been or is to be the public but not before the expiration of 30 months from the price.	of such comments to all designated Offices unless an established. These comments would also be made available to
Within 19 months from the priority date, but only in respect of so examination must be filed if the applicant wishes to postpone the date (in some Offices even later); otherwise, the applicant must, acts for entry into the national phase before those designated Offices even later.	entry into the national phase until 30 months from the priority within 20 months from the priority date, perform the prescribed
In respect of other designated Offices, the time limit of 30 month	s (or later) will apply even if no demand is filed within 19

Name and mailing address of the International Searching Authority	Authorized officer
European Patent Office, P.B. 5818 Patentlaan 2 NL-2280 HV Rijswijk Tel. (+31-70) 340-2040, Tx. 31 651 epo nl, Fax: (+31-70) 340-3016	Joëlle Gerber

See the Annex to Form PCT/IB/301 and, for details about the applicable time limits, Office by Office, see the *PCT Applicant's Guide*, Volume II, National Chapters and the WIPO Internet site.

months.

NOTES TO FORM PCT/ISA/220

These Notes are intended to give the basic instructions concerning the filing of amendments under article 19. The Notes are based on the requirements of the Patent Cooperation Treaty, the Regulations and the Administrative Instructions under that Treaty. In case of discrepancy between these Notes and those requirements, the latter are applicable. For more detailed information, see also the *PCT Applicant's Guide*, a publication of WIPO.

In these Notes, "Article", "Rule", and "Section" refer to the provisions of the PCT, the PCT Regulations and the PCT Administrative Instructions, respectively.

INSTRUCTIONS CONCERNING AMENDMENTS UNDER ARTICLE 19

The applicant has, after having received the international search report and the written opinion of the International Searching Authority, one opportunity to amend the claims of the international application. It should however be emphasized that, since all parts of the international application (claims, description and drawings) may be amended during the international preliminary examination procedure, there is usually no need to file amendments of the claims under Article 19 except where, e.g. the applicant wants the latter to be published for the purposes of provisional protection or has another reason for amending the claims before international publication. Furthermore, it should be emphasized that provisional protection is available in some States only (see *PCT Applicant's Guide*, Volume I/A, Annexes B1 and B2).

The attention of the applicant is drawn to the fact that amendments to the claims under Article 19 are not allowed where the International Searching Authority has declared, under Article 17(2), that no international search report would be established (see *PCT Applicant's Guide*, Volume I/A, paragraph 296).

What parts of the international application may be amended?

Under Article 19, only the claims may be amended.

During the international phase, the claims may also be amended (or further amended) under Article 34 before the International Preliminary Examining Authority. The description and drawings may only be amended under Article 34 before the International Examining Authority.

Upon entry into the national phase, all parts of the international application may be amended under Article 28 or, where applicable, Article 41.

When?

Within 2 months from the date of transmittal of the international search report or 16 months from the priority date, whichever time limit expires later. It should be noted, however, that the amendments will be considered as having been received on time if they are received by the International Bureau after the expiration of the applicable time limit but before the completion of the technical preparations for international publication (Rule 46.1).

Where not to file the amendments?

The amendments may only be filed with the International Bureau and not with the receiving Office or the International Searching Authority (Rule 46.2).

Where a demand for international preliminary examination has been/is filed, see below.

How?

Either by cancelling one or more entire claims, by adding one or more new claims or by amending the text of one or more of the claims as filed.

A replacement sheet must be submitted for each sheet of the claims which, on account of an amendment or amendments, differs from the sheet originally filed.

All the claims appearing on a replacement sheet must be numbered in Arabic numerals. Where a claim is cancelled, no renumbering of the other claims is required. In all cases where claims are renumbered, they must be renumbered consecutively (Section 205(b)).

The amendments must be made in the language in which the international application is to be published.

What documents must/may accompany the amendments?

Letter (Section 205(b)):

The amendments must be submitted with a letter.

The letter will not be published with the international application and the amended claims. It should not be confused with the "Statement under Article 19(1)" (see below, under "Statement under Article 19(1)").

The letter must be in English or French, at the choice of the applicant. However, if the language of the international application is English, the letter must be in English; if the language of the international application is French, the letter must be in French.

NOTES TO FORM PCT/ISA/220 (continued)

The letter must indicate the differences between the claims as filed and the claims as amended. It must, in particular, indicate, in connection with each claim appearing in the international application (it being understood that identical indications concerning several claims may be grouped), whether

- (i) the claim is unchanged;
- (ii) the claim is cancelled;
- (iii) the claim is new;
- (iv) the claim replaces one or more claims as filed;
- (v) the claim is the result of the division of a claim as filed.

The following examples illustrate the manner in which amendments must be explained in the accompanying letter:

- 1. [Where originally there were 48 claims and after amendment of some claims there are 51]: "Claims 1 to 29, 31, 32, 34, 35, 37 to 48 replaced by amended claims bearing the same numbers; claims 30, 33 and 36 unchanged; new claims 49 to 51 added."
- 2. [Where originally there were 15 claims and after amendment of all claims there are 11]: "Claims 1 to 15 replaced by amended claims 1 to 11."
- 3. [Where originally there were 14 claims and the amendments consist in cancelling some claims and in adding new claims]:
 "Claims 1 to 6 and 14 unchanged; claims 7 to 13 cancelled; new claims 15, 16 and 17 added." or
 "Claims 7 to 13 cancelled; new claims 15, 16 and 17 added; all other claims unchanged."
- 4. [Where various kinds of amendments are made]: "Claims 1–10 unchanged; claims 11 to 13, 18 and 19 cancelled; claims 14, 15 and 16 replaced by amended claim 14; claim 17 subdivided into amended claims 15, 16 and 17; new claims 20 and 21 added."

"Statement under article 19(1)" (Rule 46.4)

The amendments may be accompanied by a statement explaining the amendments and indicating any impact that such amendments might have on the description and the drawings (which cannot be amended under Article 19(1)).

The statement will be published with the international application and the amended claims.

It must be in the language in which the international application is to be published.

It must be brief, not exceeding 500 words if in English or if translated into English.

It should not be confused with and does not replace the letter indicating the differences between the claims as filed and as amended. It must be filed on a separate sheet and must be identified as such by a heading, preferably by using the words "Statement under Article 19(1)."

It may not contain any disparaging comments on the international search report or the relevance of citations contained in that report. Reference to citations, relevant to a given claim, contained in the international search report may be made only in connection with an amendment of that claim.

Consequence if a demand for international preliminary examination has already been filed

If, at the time of filing any amendments and any accompanying statement, under Article 19, a demand for international preliminary examination has already been submitted, the applicant must preferably, at the time of filing the amendments (and any statement) with the International Bureau, also file with the International Preliminary Examining Authority a copy of such amendments (and of any statement) and, where required, a translation of such amendments for the procedure before that Authority (see Rules 55.3(a) and 62.2, first sentence). For further information, see the Notes to the demand form (PCT/IPEA/401).

If a demand for international preliminary examination is made, the written opinion of the International Searching Authority will, except in certain cases where the International Preliminary Examining Authority did not act as International Searching Authority and where it has notified the International Bureau under Rule 66.1 bis(b), be considered to be a written opinion of the International Preliminary Examining Authority. If a demand is made, the applicant may submit to the International Preliminary Examining Authority a reply to the written opinion together, where appropriate, with amendments before the expiration of 3 months from the date of mailing of Form PCT/ISA/220 or before the expiration of 22 months from the priority date, whichever expires later (Rule 43bis.1(c)).

Consequence with regard to translation of the international application for entry into the national phase

The applicant's attention is drawn to the fact that, upon entry into the national phase, a translation of the claims as amended under Article 19 may have to be furnished to the designated/elected Offices, instead of, or in addition to, the translation of the claims as filed.

For further details on the requirements of each designated/elected Office, see the *PCT Applicant's Guide*, Volume II.

PATENT COOPERATION TREATY

PCT

INTERNATIONAL SEARCH REPORT

(PCT Article 18 and Rules 43 and 44)

Applicant's or agent's file reference	FOR FURTHER	see Form PCT/ISA/220
189550/PCT	ACTION as	s well as, where applicable, item 5 below.
International application No.	International filing date (day/month/year	(Earliest) Priority Date (day/month/year)
PCT/US2008/080498	20/10/2008	19/10/2007
Applicant	· · · · · · · · · · · · · · · · · · ·	
OSTEOTECH, INC.		
This international search report has been according to Article 18. A copy is being tr		Authority and is transmitted to the applicant
This international search report consists of	of a total of sheets.	•
X It is also accompanied by	a copy of each prior art document cited in	this report.
Basis of the report a. With regard to the language, the	international search was carried out on the	e basis of:
	application in the language in which it was	
	e international application into irnished for the purposes of international s	, which is the language earch (Rules 12.3(a) and 23.1(b))
	report has been established taking into actories to this Authority under Rule 91 (Rule 43.6 <i>t</i>	count the rectification of an obvious mistake ois(a)).
c. With regard to any nucle	otide and/or amino acid sequence discl	sed in the international application, see Box No. I.
2. Certain claims were fou	nd unsearchable (See Box No. II)	
3. Unity of invention is lac	kina (see Boy No III)	
	Amig (655 Box 145 m)	
4. With regard to the title ,		
the text is approved as su	• • •	
the text has been establis	shed by this Authority to read as follows:	
	·	
	• •	
5. With regard to the abstract,	·	
the text is approved as su	bmitted by the applicant	
		thority as it appears in Box No. IV. The applicant
may, within one month it	om the date of mailing of this international s	search report, submit comments to this Authority
6. With regard to the drawings,		
a. the figure of the drawings to be p	oublished with the abstract is Figure No	
as suggested by	the applicant	
as selected by thi	s Authority, because the applicant failed to	suggest a figure
as selected by thi	s Authority, because this figure better chai	acterizes the invention
b. X none of the figures is to b	e published with the abstract	

A. CLASSIFICATION OF SUBJECT MATTER INV. A61L27/36 A61L27/50 A61L27/54 According to International Patent Classification (IPC) or to both national classification and IPC **B. FIELDS SEARCHED** Minimum documentation searched (classification system followed by classification symbols) A61L Documentation searched other than minimum documentation to the extent that such documents are included in the fields searched Electronic data base consulted during the international search (name of data base and, where practical, search terms used) EPO-Internal, WPI Data, BIOSIS, EMBASE, INSPEC C. DOCUMENTS CONSIDERED TO BE RELEVANT Citation of document, with indication, where appropriate, of the relevant passages Relevant to claim No. Category* US 2003/039676 A1 (BOYCE TODD M [US] ET X 1-20 AL) 27 February 2003 (2003-02-27) paragraphs [0002], [0010], [0070] claims 1,7,23,24 example 6 US 2004/059364 A1 (GASKINS BARTON D [US] 1-20 ET AL) 25 March 2004 (2004-03-25) paragraphs [0002], [0055] example 1 claims 25,29 US 7 163 691 B2 (KNAACK DAVID [US] ET AL) 1-2016 January 2007 (2007-01-16) column 2, lines 10-13column 3, lines 50-54 column 12, lines 6-66 examples 2,12 Further documents are listed in the continuation of Box C. See patent family annex. Special categories of cited documents: "T" later document published after the international filing date or priority date and not in conflict with the application but "A" document defining the general state of the art which is not cited to understand the principle or theory underlying the considered to be of particular relevance invention *E* earlier document but published on or after the international "X" document of particular relevance; the claimed invention filing date cannot be considered novel or cannot be considered to "L" document which may throw doubts on priority claim(s) or involve an inventive step when the document is taken alone which is cited to establish the publication date of another "Y" document of particular relevance; the claimed invention citation or other special reason (as specified) cannot be considered to involve an inventive step when the 'O' document referring to an oral disclosure, use, exhibition or document is combined with one or more other such docuother means ments, such combination being obvious to a person skilled in the art. document published prior to the international filing date but *&* document member of the same patent family later than the priority date claimed Date of the actual completion of the international search Date of mailing of the international search report 23/10/2009 15 October 2009 Name and mailing address of the ISA/ Authorized officer European Patent Office, P.B. 5818 Patentlaan 2 NL - 2280 HV Rijswijk Tel. (+31-70) 340-2040, Cadamuro, Sergio Fax: (+31-70) 340-3016

HTILIHATIVHAL VLAHVITHLI VITI

Information on patent family members

International application No PCT/US2008/080498

Patent document cited in search report		Publication date		Patent family member(s)	Publication date
US 2003039676	A1	27-02-2003	US US	2008188945 A1 2007233272 A1	07-08-2008 04-10-2007
US 2004059364	A1	25-03-2004	NONE		
US 7163691	B2	16-01-2007	AU CA EP JP WO US US	2008255147 A1 2433038 A1 1434608 A2 2005505351 T 03030956 A2 2003143258 A1 2008145392 A1	08-01-2009 17-04-2003 07-07-2004 24-02-2005 17-04-2003 31-07-2003 19-06-2008